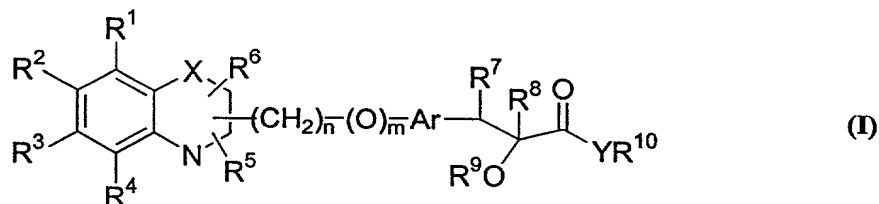


We claim

1. A compound of formula (I)



- 5 its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of R<sup>5</sup> and R<sup>6</sup> may represent an oxo group when attached to a carbon atom; R<sup>5</sup> and R<sup>6</sup> when attached to a nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl group; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group; R<sup>7</sup> represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, optionally substituted aralkyl group or forms a bond together with adjacent group R<sup>8</sup>; R<sup>8</sup> represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl or R<sup>8</sup> forms a bond together with

R<sup>7</sup>; R<sup>9</sup> represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxy, carbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> represents hydrogen or optionally substituted groups  
5 selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents oxygen or NR<sup>12</sup>, where R<sup>12</sup> represents hydrogen, alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> and R<sup>12</sup> together may form a 5 or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or  
10 nitrogen; the linking group represented by -(CH<sub>2</sub>)<sub>n</sub>-(O)<sub>m</sub>- may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1.

2. A compound according to claim 1, wherein when the groups represented by R<sup>1</sup>  
15 - R<sup>4</sup> and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom are substituted, the substituents are selected from halogen, hydroxy, or nitro or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, arylamino, aminoalkyl, aryloxy, alkoxycarbonyl, alkylamino,  
20 alkoxyalkyl, alkylthio, thioalkyl, carboxylic acid or its derivatives, or sulfonic acid or its derivatives.

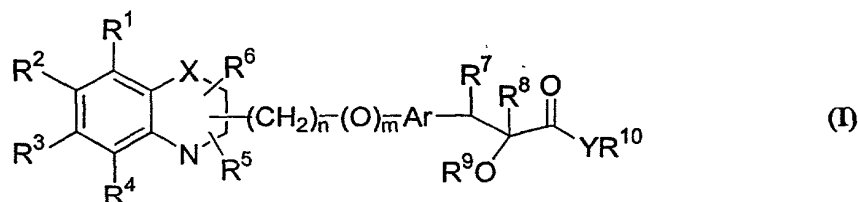
3. A compound according to claim 1, wherein when the groups R<sup>5</sup> and R<sup>6</sup>  
25 attached to nitrogen are substituted, the substituents are selected from halogen atoms, hydroxy, acyl, acyloxy, or amino groups.

4. A compound according to claim 1, wherein Ar represents optionally  
30 substituted divalent phenylene, naphthylene, pyridyl, quinolinyl, benzofuranyl, dihydrobenzofuryl, benzopyranyl, dihydrobenzopyranyl, indolyl, indolinyl, azaindolyl, azaindolyl, pyrazolyl, benzothiazolyl, or benzoxazolyl groups.

5. A compound according to claim 1, wherein the substituents on the group  
represented by R<sup>9</sup> are selected from halogen, hydroxy, or nitro or optionally

substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, arylamino, aminoalkyl, aryloxy, alkoxycarbonyl, alkylamino, alkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid or its derivatives, or sulfonic acid or its derivatives .

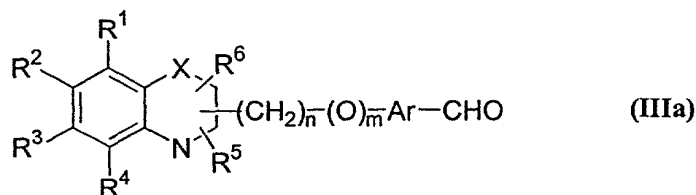
6. A process for the preparation of compound of formula (I)



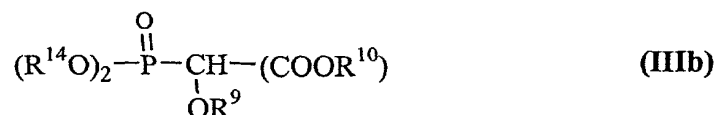
its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxy, aralkoxy, alkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxy, aralkoxy, or aralkoxy, alkoxycarbonyl group; Ar represents an optionally substituted divalent single or fused aromatic or

heterocyclic group;  $R^7$  and  $R^8$  together represent a bond;  $R^9$  represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxyacarbonyl, aryloxyacarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups;  $R^{10}$  represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl group; Y represents oxygen; the linking group represented by  $-(CH_2)_n-(O)_m-$  may be attached either through nitrogen atom or carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1, which comprises :

- 10 a) reacting a compound of formula (IIIa)



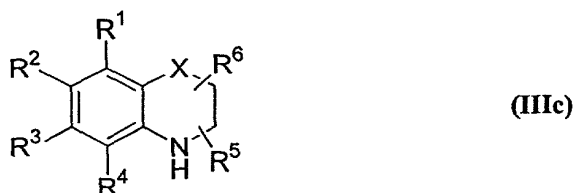
where all symbols are as defined above with a compound of formula (IIIb)



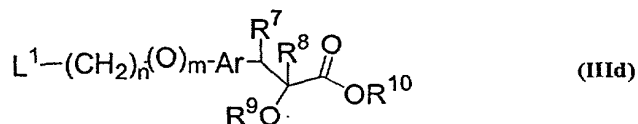
where  $R^9$  and  $R^{10}$  are as defined above and  $R^{14}$  represents  $(C_1-C_6)$ alkyl, to yield compound of formula (I) defined above;

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- b) reacting a compound of formula (IIIc)

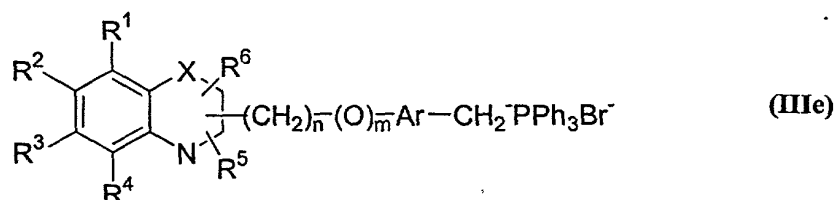


where all symbols are as defined above with a compound of formula (IIId)

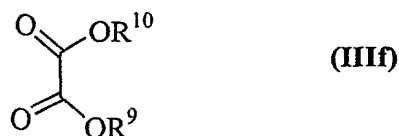


where  $R^7$  and  $R^8$  together represent a bond and all symbols are as defined above and  $L^1$  is a leaving group to produce a compound of formula (I) defined above;

c) reacting a compound of formula (IIIe)

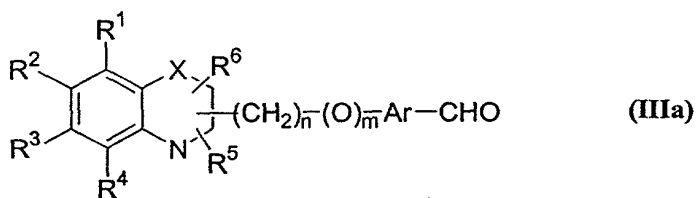


5 where all symbols are as defined above with a compound of formula (IIIf)

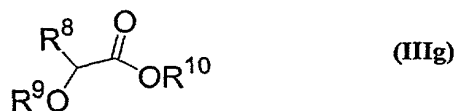


where  $R^9 = R^{10}$  and are as defined above to produce a compound of the formula (I);

d) reacting a compound of formula (IIIa)

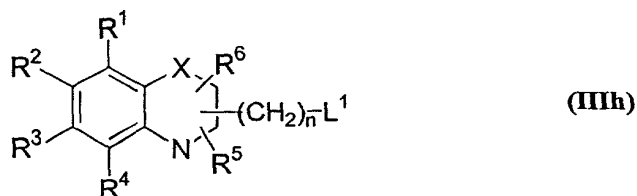


10 where all other symbols are as defined above with a compound of formula (IIIg)

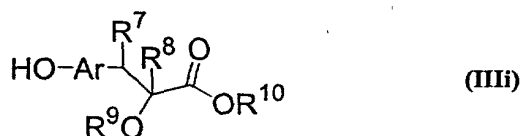


where  $R^8$ ,  $R^9$ , and  $R^{10}$  are as defined above to yield a compound of formula (I) as defined above after dehydration;

e) reacting a compound of formula (IIIh)

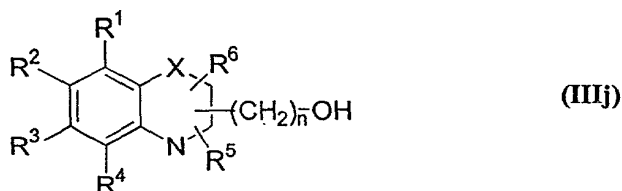


where all symbols are as defined earlier and  $L^1$  represents a leaving group, with compound of formula (IIIi)

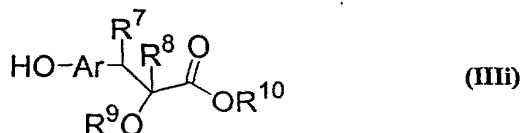


- 5 where  $R^7$  and  $R^8$  together represent a bond and  $R^9$ ,  $R^{10}$  and Ar are as defined earlier to produce a compound of the formula (I) where m represents an integer 1 and all other symbols are as defined above;

f) reacting a compound of formula (IIIj)



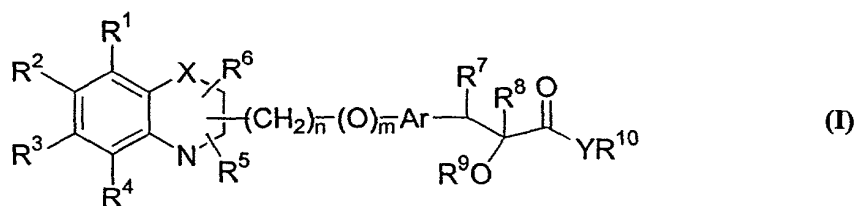
- 10 where all symbols are as defined above with a compound of formula (IIIi)



where  $R^7$  and  $R^8$  together represent a bond and  $R^9$ ,  $R^{10}$  and Ar are as defined above to produce a compound of formula (I) where m represents an integer 1 and all other symbols are as defined above; and optionally,

- 15 g) converting the compounds of formula (I) obtained in any of the processes described above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates.

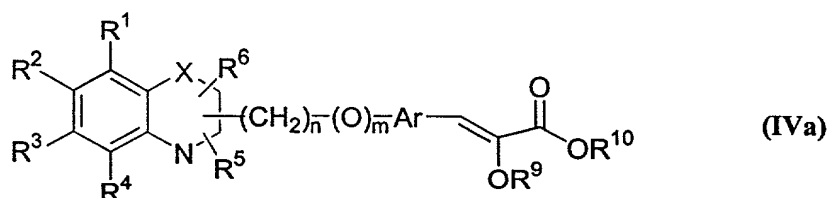
7. A process for the preparation of compound of formula (I)



its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of R<sup>5</sup> and R<sup>6</sup> may represent an oxo group when attached to a carbon atom; R<sup>5</sup> and R<sup>6</sup> when attached to a nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group; R<sup>7</sup> represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or optionally substituted aralkyl group; R<sup>8</sup> represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl; R<sup>9</sup> represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> represents hydrogen or optionally substituted groups

selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents oxygen; the linking group represented by  $-(CH_2)_n-(O)_m-$  may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1, which comprises :

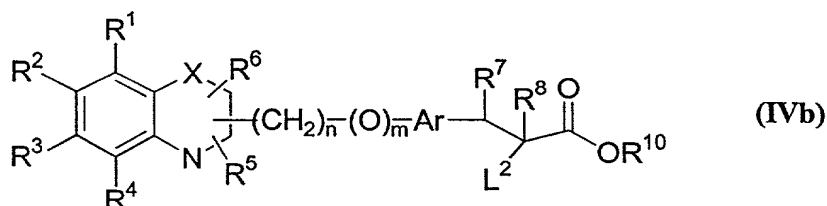
- 5 a) reducing a compound of formula (IVa)



which represents a compound of formula (I) where  $R^7$  and  $R^8$  together represent a bond and Y represents an oxygen atom and all other symbols are as defined above, prepared according to any of the processes claimed in claim 6, to yield a compound of the formula (I) where  $R^7$  and  $R^8$  each represent hydrogen atom and all symbols are as defined above;

10

- b) reacting a compound of formula (IVb)



where all symbols are as defined above and  $L^2$  is a leaving group with an alcohol of formula (IVc),

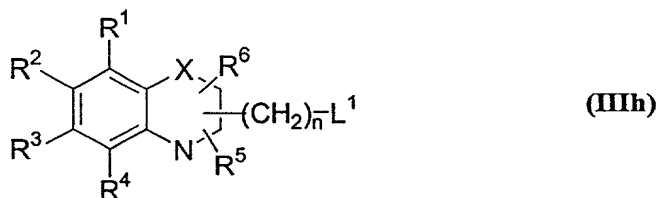
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where  $R^9$  represents optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxy carbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups produce a compound of the formula (I) defined above;

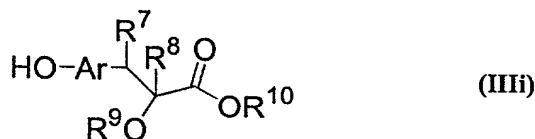
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- c) reacting a compound of formula (IIIh)





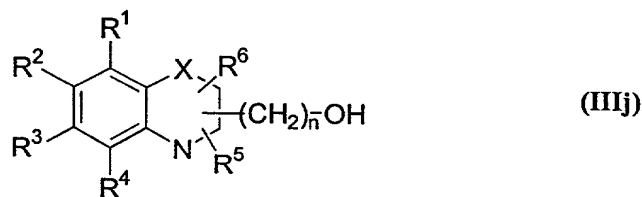
where all symbols are as defined above and  $L^1$  is a leaving group with a compound of formula (IIIi)



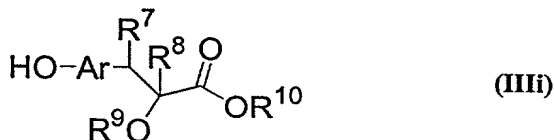
where all symbols are as defined above to produce a compound of the formula (I)

5 where  $m$  represents an integer 1 and all other symbols are as defined above;

d) reacting a compound of formula (IIIj)

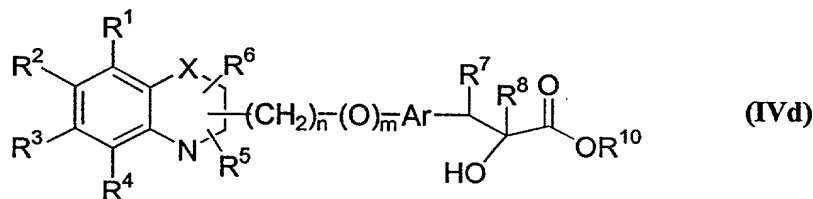


where all symbols are as defined above with a compound of formula (IIIi)



where all symbols are as defined above to produce a compound of formula (I) where  $m$  represents an integer 1 and all other symbols are as defined above;

e) reacting a compound of formula (IVd)

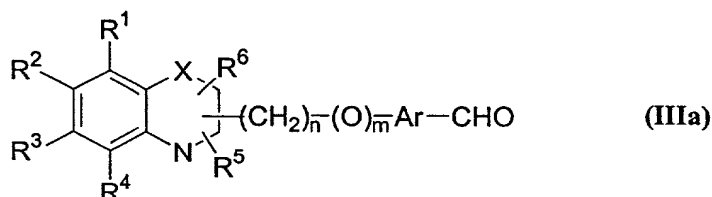


15 which represents a compound of formula (I) where  $R^9$  represents a hydrogen atom and all other symbols are as defined above with a compound of formula (IVe)

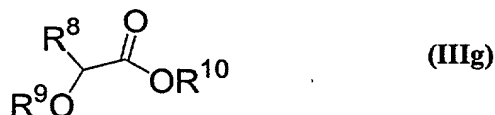


where  $R^9$  represents optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and  $L^2$  is a halogen atom to produce a compound of formula (I) defined above;

f) reacting a compound of the formula (IIIa)

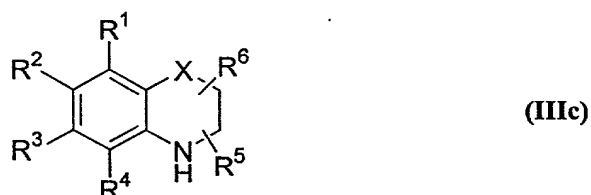


where all symbols are as defined above with a compound of formula (IIIg)

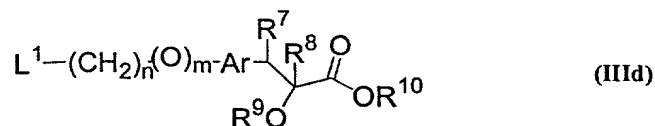


5 where  $\text{R}^8, \text{R}^9, \text{R}^{10}$  are as defined above to produce a compound of formula (I) after dehydroxylation;

g) reacting a compound of formula (IIIc)

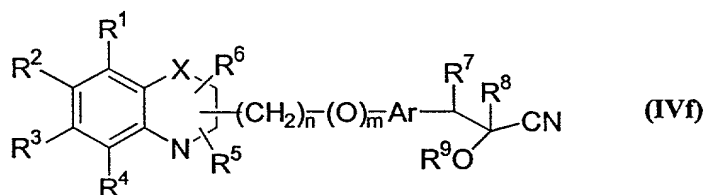


where all symbols are as defined above with a compound of formula (IIIId)



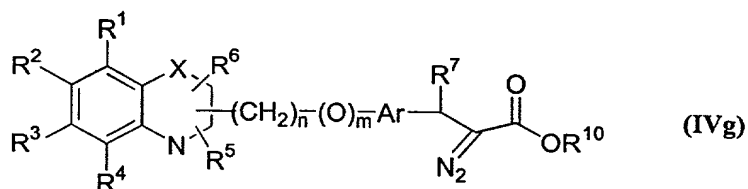
where  $\text{L}^1$  is a leaving group and all other symbols are as defined above to produce a compound of formula (I) defined above;

h) converting a compound of formula (IVf)



15 where all symbols are as defined above to a compound of formula (I) defined above;

i) reacting a compound of formula (IVg)



where all symbols are as defined above with a compound of formula (IVc)

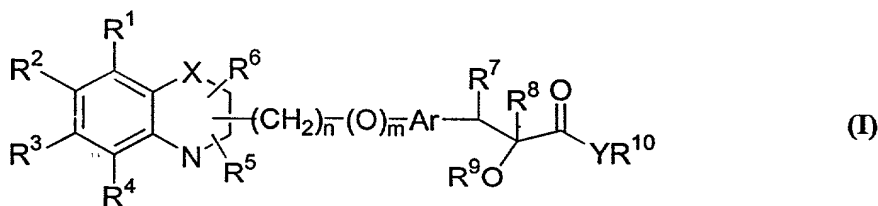


where  $\text{R}^9$  represents optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxyacetyl, aryloxyacetyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups to produce a compound of formula (I), optionally;

j). resolving the compound of formula (I) obtained in any of the processes described above into its stereoisomers, and optionally;

k) converting the compounds of formula (I) or its stereoisomers obtained in any of the processes described above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates.

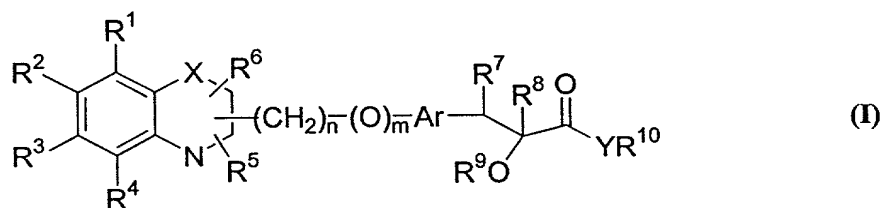
8. A process for the preparation of compound of formula (I)



its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ , and the groups  $\text{R}^5$  and  $\text{R}^6$  when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxyacetyl, aryloxyacetyl, aralkoxyacetyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxyacetylamino, aryloxyacetylamino, aralkoxyacetylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; or one or both of  $\text{R}^5$  and  $\text{R}^6$

may represent an oxo group when attached to a carbon atom;  $R^5$  and  $R^6$  when attached to a nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or  $NR^{11}$  where  $R^{11}$  is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group;  $R^7$  represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or optionally substituted aralkyl group or forms a bond together with the adjacent group  $R^8$ ;  $R^8$  represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl or  $R^8$  forms a bond together with  $R^7$ ;  $R^9$  represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups;  $R^{10}$  represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents  $NR^{12}$ , where  $R^{12}$  represents hydrogen, alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl group;  $R^{10}$  and  $R^{12}$  together may form a 5 or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or nitrogen; the linking group represented by  $-(CH_2)_n-(O)_m-$  may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1, which comprises :

a) reacting a compound of formula (I)



where all symbols are as defined above and Y represents oxygen,  $YR^{10}$  represents a halogen atom, or  $COYR^{10}$  represents a mixed anhydride group with appropriate amines of the formula  $NHR^{10}R^{12}$ , where  $R^{10}$  and  $R^{12}$  are as defined earlier and, optionally;

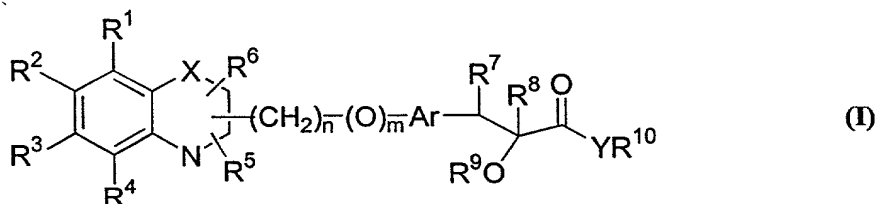
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b) resolving the compound of formula (I) obtained above into stereoisomers, optionally;

c) converting the compounds of formula (I) obtained above into pharmaceutically acceptable salts or pharmaceutically acceptable solvates.

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9. A compound of formula (I)



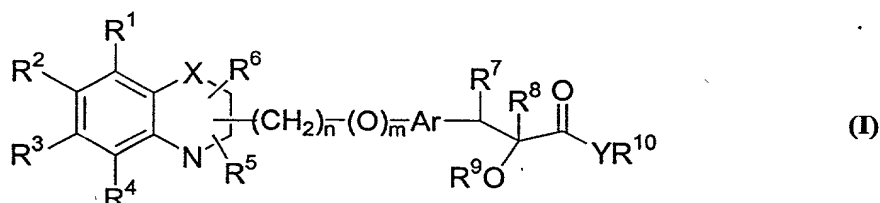
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its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , and the groups  $R^5$  and  $R^6$  when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of  $R^5$  and  $R^6$  may represent an oxo group when attached to a carbon atom;  $R^5$  and  $R^6$  when attached to nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl,

25

alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group; R<sup>7</sup> and R<sup>8</sup> together represent a bond; R<sup>9</sup> represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents oxygen; the linking group represented by -(CH<sub>2</sub>)<sub>n</sub>-(O)<sub>m</sub>- may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1, prepared according to the process of claim 6.

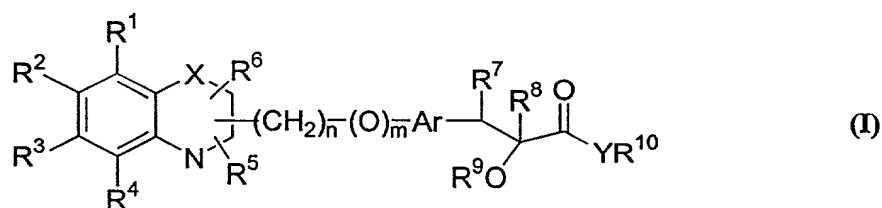
10. A compound of formula (I)



its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of R<sup>5</sup> and R<sup>6</sup> may represent an oxo group when attached to a carbon atom; R<sup>5</sup> and R<sup>6</sup> when attached to a

nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxy carbonyl, aryloxy carbonyl, aralkoxy carbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxy carbonyl, aryloxy carbonyl, or aralkoxy carbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group; R<sup>7</sup> represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, optionally substituted aralkyl group; R<sup>8</sup> represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl; R<sup>9</sup> represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxy carbonyl, aryloxy carbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents oxygen; the linking group represented by -(CH<sub>2</sub>)<sub>n</sub>-(O)<sub>m</sub>- may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1, prepared according to the process of claim 7.

11. A compound of formula (I)

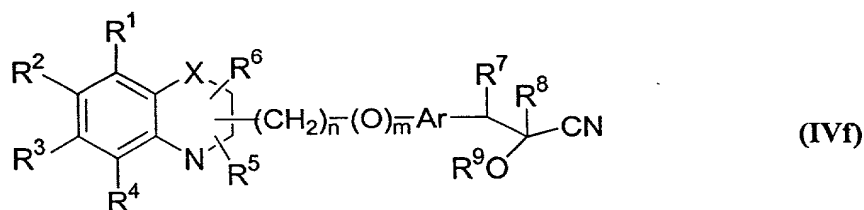


its derivatives, its analogs, its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts, its pharmaceutically acceptable solvates, wherein the groups R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and the groups R<sup>5</sup> and R<sup>6</sup> when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino,

alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of R<sup>5</sup> and R<sup>6</sup> may  
 5 represent an oxo group when attached to a carbon atom; R<sup>5</sup> and R<sup>6</sup> when attached to a nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy,  
 10 heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR<sup>11</sup> where R<sup>11</sup> is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl  
 15 groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group; R<sup>7</sup> represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or optionally substituted aralkyl group or forms a bond together with the adjacent group R<sup>8</sup>; R<sup>8</sup> represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl or R<sup>8</sup> forms a bond together with R<sup>7</sup>; R<sup>9</sup>  
 20 represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl group; R<sup>10</sup> represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents NR<sup>12</sup>,  
 25 where R<sup>12</sup> represents hydrogen, alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; R<sup>10</sup> and R<sup>12</sup> together may form a 5 or 6 membered cyclic structure containing carbon atoms, which may optionally contain one or more heteroatoms selected from oxygen, sulfur or nitrogen; the linking group represented by -(CH<sub>2</sub>)<sub>n</sub>-(O)<sub>m</sub>- may be attached either through a nitrogen atom or a carbon atom; n  
 30 is an integer ranging from 1-4 and m is an integer 0 or 1, prepared according to the process of claim 8.

12. An intermediate of formula (IVf)

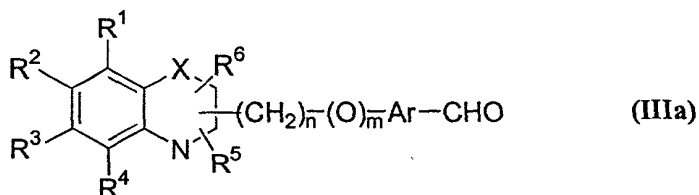




where the groups  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ , and the groups  $\text{R}^5$  and  $\text{R}^6$  when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of  $\text{R}^5$  and  $\text{R}^6$  may represent an oxo group when attached to a carbon atom;  $\text{R}^5$  and  $\text{R}^6$  when attached to nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or  $\text{NR}^{11}$  where  $\text{R}^{11}$  is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group;  $\text{R}^7$  represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or optionally substituted aralkyl group;  $\text{R}^8$  represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, or optionally substituted aralkyl;  $\text{R}^9$  represents hydrogen, or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; the linking group represented by  $-(\text{CH}_2)_n-(\text{O})_m-$  may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1.

13. A process for the preparation of compound of formula (IVf) described in claim 12 where  $R^7$  and  $R^8$  represent hydrogen atoms and all other symbols are as defined in claim 12 which comprises :

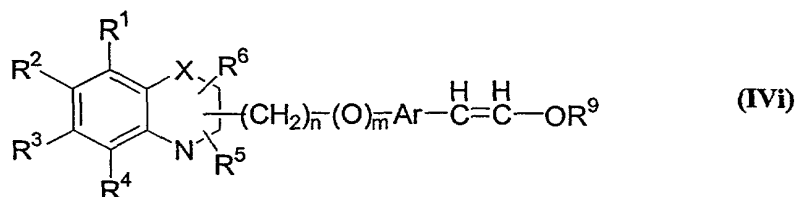
- 5 a) reacting a compound of formula (IIIa)



where all symbols are as defined above with a compound of formula (IVh)

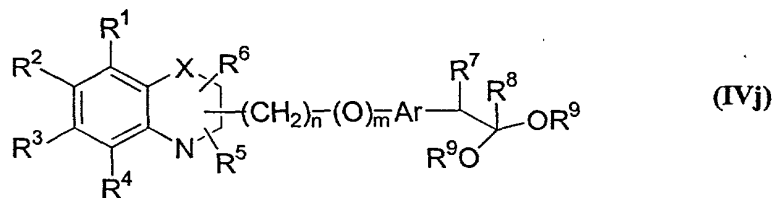


- 10 where  $R^9$  represents optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and Hal represents a halogen atom, to yield a compound of formula (IVi)



where all symbols are as defined above,

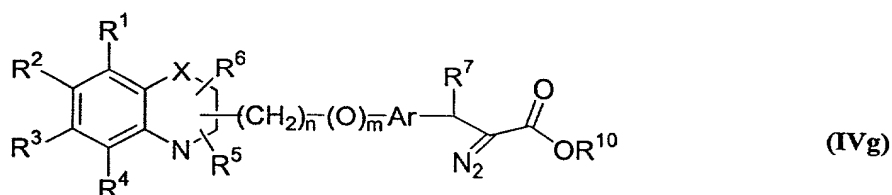
- 15 b) reacting a compound of formula (IVi) with an alcohol of the formula  $R^9OH$  where  $R^9$  is as defined above to yield a compound of formula (IVj),



where are all symbols are as defined above,

- c) reacting a compound of formula (IVj) obtained above where all symbols are as defined above with trialkylsilyl cyanide to produce a compound of formula (IVf) where all symbols are as defined above.

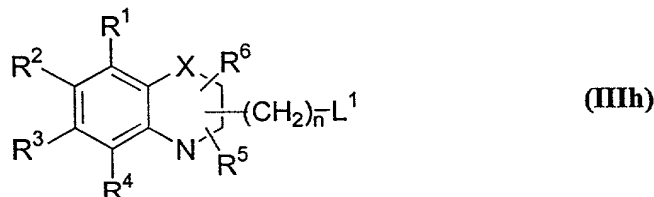
14. An intermediate of formula (IVg)



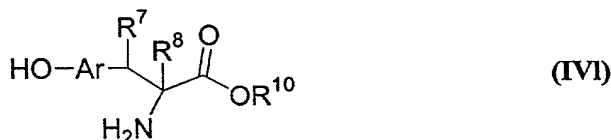
where the groups  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , and the groups  $R^5$  and  $R^6$  when attached to a carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of  $R^5$  and  $R^6$  may represent an oxo group when attached to a carbon atom;  $R^5$  and  $R^6$  when attached to a nitrogen atom represents hydrogen, hydroxy, formyl or optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, alkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or  $NR^{11}$  where  $R^{11}$  is selected from hydrogen, or optionally substituted alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl, or aralkoxycarbonyl groups; Ar represents an optionally substituted divalent single or fused aromatic or heterocyclic group;  $R^7$  represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, or optionally substituted aralkyl group;  $R^{10}$  represents hydrogen or optionally substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups; Y represents oxygen; the linking group represented by  $-(CH_2)_n-(O)_m-$  may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1.

15. A process for the preparation of compound of formula (IVg) described in claim 14, which comprises :

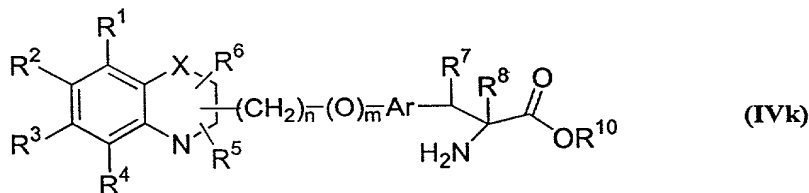
a) reacting a compound of formula (IIIh)



5 where L<sup>1</sup> is a leaving group and all other symbols are as defined in claim 14 with a compound of formula (IVl)



where R<sup>8</sup> is a hydrogen atom and all other symbols are as defined in claim 14, to yield a compound of formula (IVk)



10

where R<sup>8</sup> is a hydrogen atom and all other symbols are as defined above,

b) reacting a compound of formula (IVk) obtained above with a diazotizing agent.

16. A compound according to claim 1 which is selected from:

15 Ethyl (E/Z)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropenoate;

(+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;

(+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;

(-) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;

Ethyl (E/Z)-3-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-

20 ethoxypropenoate;

Ethyl (E/Z)-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropenoate;

(+) Methyl 3-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-

ethoxypropanoate;

- (+) Methyl 3-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoate;
- (-) Methyl 3-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoate;
- 5 (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (-) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- 10 (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (-) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) Methyl 2-(2-fluorobenzyl)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- 15 (+) Methyl 2-(2-fluorobenzyl)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (-) Methyl 2-(2-fluorobenzyl)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- 20 Ethyl (E/Z)-3-[4-[2-(3-oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropenoate;
- (+) Methyl 3-[4-[2-(3-oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) Methyl 3-[4-[2-(3-oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (-) Methyl 3-[4-[2-(3-oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- Ethyl (E/Z)-3-[6-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropenoate;
- 25 (+) Methyl 3-[6-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoate;
- (+) Methyl 3-[6-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoate;
- 30 (-) Methyl 3-[6-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoate;
- Ethyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoate;
- Ethyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoate;

- Ethyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-benzoyloxypropanoate;  
 Ethyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-butoxypropanoate;  
 Ethyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hexyloxy propanoate;  
 Ethyl (E/Z)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropenoate;  
 5 (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 (-) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 Ethyl (E/Z)-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-  
 phenoxypropenoate;  
 10 (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 (+) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 (-) Methyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;  
 Ethyl (E/Z)-3-[4-(4-methyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropenoate;  
 15 (+) Methyl 3-[4-(4-methyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropanoate;  
 (+) Methyl 3-[4-(4-methyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropanoate;  
 (-) Methyl 3-[4-(4-methyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 20 ethoxypropanoate;  
 Ethyl (E/Z)-3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropenoate;  
 (+) Methyl 3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropanoate;  
 25 (+) Methyl 3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropanoate;  
 (-) Methyl 3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-  
 ethoxypropanoate;  
 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its  
 30 salts;  
 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its  
 salts;

- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- 5 (+) 3-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- 10 (+) 3-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)methylbenzofuran-5-yl]-2-ethoxypropanoic acid and its salts;
- 15 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- 20 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 25 (+) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (-) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 30 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;

- (+) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 5 (-) N-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 10 (-) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (+) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 15 (+) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- (-) N-Benzyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanamide;
- 20 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- 2-(2-Fluorobenzyl)-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[4-[2-(3-Oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- 25 (+) 3-[4-[2-(3-Oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[4-[2-(3-Oxo-2H-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[4-[2-(3-Oxo-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- 30 (+) 3-[4-[2-(3-Oxo-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;



- (-) 3-[4-[2-(3-Oxo-2H-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[6-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and its salts;
- 5 (+) 3-[6-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[6-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and its salts;
- (+) 3-[6-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and
- 10 its salts;
- (+) 3-[6-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[6-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]naphthyl]-2-ethoxypropanoic acid and its salts;
- 15 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and its salts;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and
- 20 its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and its salts;
- 25 (-) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-hydroxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-benzyloxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-benzyloxypropanoic acid
- 30 and its salts;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-benzyloxypropanoic acid and its salts;

- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-butoxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-butoxypropanoic acid and its salts;
- 5 (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-butoxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hexyloxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hexyloxypropanoic acid and its salts;
- 10 (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-hexyloxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- 15 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- 20 (+) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (-) 3-[4-[2-(2,3-Dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- 25 (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- (-) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- 30 (+) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;

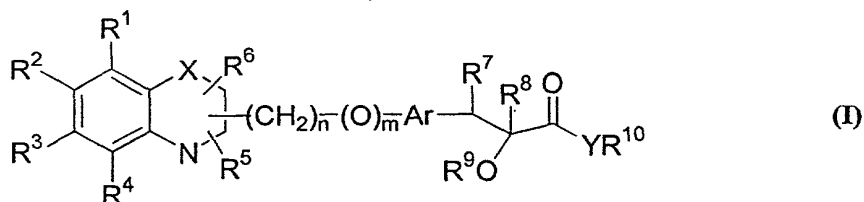
- (+) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (-) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzoxazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- 5    (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- (+) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- (-) Methyl 2-methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoate;
- 10   (+) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (+) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- 15   (-) 2-Methyl-3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-phenoxypropanoic acid and its salts;
- (+) 4-Nitrophenyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) 4-Nitrophenyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- 20   (-) 4-Nitrophenyl 3-[4-[2-(2,3-dihydro-1,4-benzothiazin-4-yl)ethoxy]phenyl]-2-ethoxypropanoate;
- (+) 3-[4-(4-Benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoic acid and its salts;
- 25   (+) 3-[4-(4-Benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoic acid and its salts;
- (-) 3-[4-(4-Benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoic acid and its salts;
- (+) 4-Nitrophenyl-3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoate;
- 30   (+) 4-Nitrophenyl-3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoate; and

(-) 4-Nitrophenyl-3-[4-(4-benzyl-3,4-dihydro-2H-1,4-benzoxazin-2-yl)methoxyphenyl]-2-ethoxypropanoate.

17. A method of preventing or treating hypercholesteremia, obesity with  
5 beneficial effects on hyperlipemia, hyperglycemia, osteoporosis, obesity, glucose intolerance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 1 to a patient in need thereof.

10 18. A method according to claim 17, wherein the disease is type II diabetes, impaired glucose tolerance, dyslipidemia, disorders related to Syndrome X including hypertension, obesity, insulin resistance, atherosclerosis, hyperlipidemia, coronary artery disease and other cardiovascular disorders; renal diseases including  
15 glomerulonephritis, glomerulosclerosis, nephrotic syndrome, and hypertensive nephrosclerosis; psoriasis, polycystic ovarian syndrome (PCOS), dementia, diabetic complications and osteoporosis.

19. A pharmaceutical composition which comprises a compound of formula (I)



20 as defined in claim 1 and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

20. A pharmaceutical composition as claimed in claim 19, in the form of a tablet, capsule, powder, syrup, solution or suspension.

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21. A method of preventing or treating hypercholesteremia, obesity with beneficial effects on hyperlipemia, hyperglycemia, osteoporosis, obesity, glucose intolerance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I)

as defined in claim 1, and a pharmaceutically acceptable carrier, diluent, solvate or excipient to a patient in need thereof.

22. A method according to claim 21, wherein the disease is type II diabetes,  
5 impaired glucose tolerance, dyslipidemia, disorders related to Syndrome X including hypertension, obesity, insulin resistance, atherosclerosis, hyperlipidemia, coronary artery disease and other cardiovascular disorders; renal diseases including glomerulonephritis, glomerulosclerosis, nephrotic syndrome, or hypertensive nephrosclerosis; psoriasis, polycystic ovarian syndrome (PCOS), dementia, diabetic  
10 complications and osteoporosis.

23. A method of reducing total cholesterol, body weight, blood plasma glucose, triglycerides, LDL, VLDL and free fatty acids in the plasma comprising administering a compound of formula (1), as defined in claim 1 and a pharmaceutically acceptable  
15 carrier, diluent or solvates or excipient to a patient in need thereof.

24. A pharmaceutical composition which comprises, a compound according to claim 16 as an active ingredient and a pharmaceutically acceptable carrier, diluent or excipient.  
20

25. A pharmaceutical composition as claimed in claim 24, in the form of a tablet, capsule, powder, syrup, solution or suspension.

26. A method of preventing or treating hypercholesteremia, obesity with  
25 beneficial effects on hyperlipemia, hyperglycemia, osteoporosis, obesity, glucose intolerance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 16, and a pharmaceutically acceptable carrier, diluent, solvate or excipient to a patient in need thereof.

27. A method according to claim 26, wherein the disease is type II diabetes, impaired glucose tolerance, dyslipidemia, disorders related to Syndrome X selected from hypertension, obesity, insulin resistance, atherosclerosis, hyperlipidemia,  
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coronary artery disease and other cardiovascular disorders; renal diseases including glomerulonephritis, glomerulosclerosis, nephrotic syndrome, and hypertensive nephrosclerosis, psoriasis, and polycystic ovarian syndrome (PCOS), dementia, diabetic complications and osteoporosis.

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28. A method of reducing cholesterol, body weight, blood glucose, triglycerides, and free fatty acids comprising administering a compound as defined in claim 16 and a pharmaceutically acceptable carrier, diluent or solvates or excipient to a patient in need thereof.

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